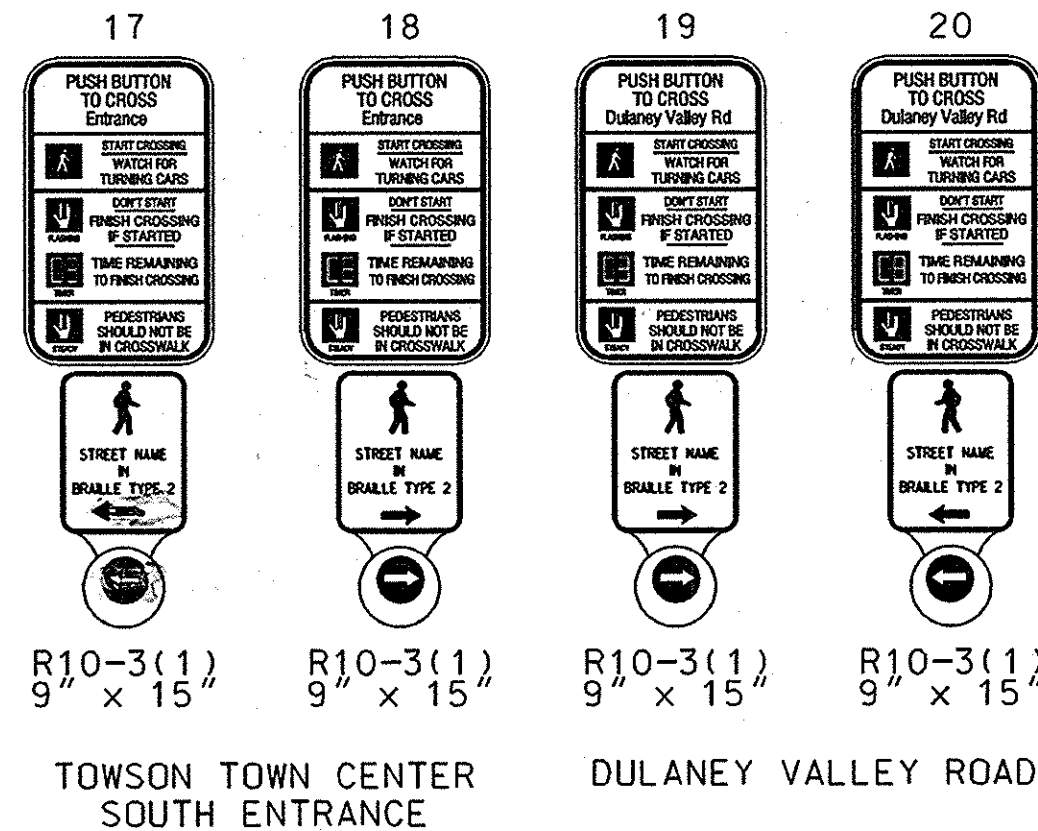
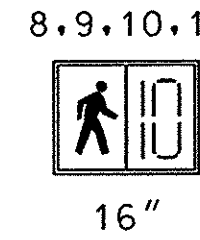


MD 146 is considered to run
in a North/South direction.

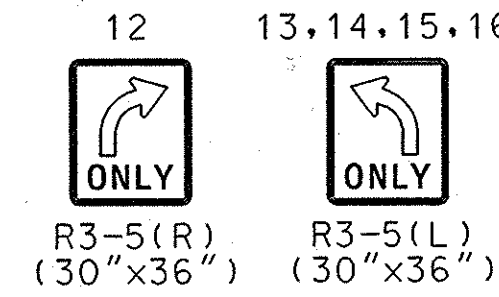
PROPOSED SIGNS



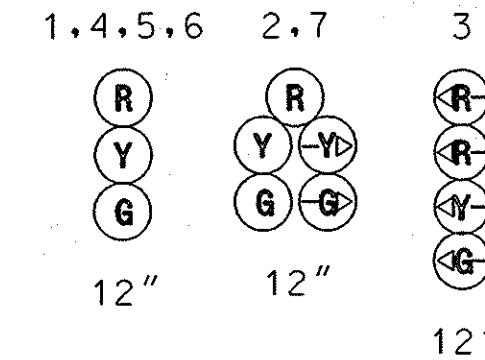
REMOVE AND REPLACE EXISTING SIGNALS



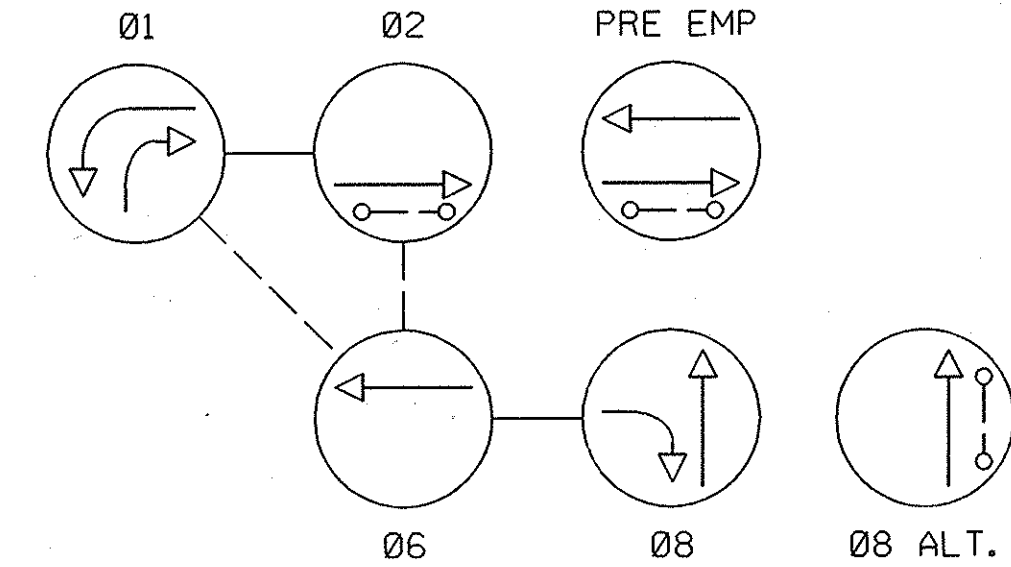
EXISTING SIGNS



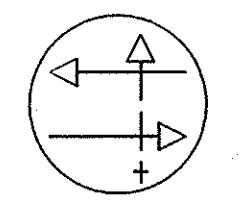
EXISTING SIGNALS



NEMA PHASING



FLASHING OPERATION



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

MD 146 (DULANEY VALLEY ROAD)

MD 146 (DULANEY VALLEY ROAD)

CONSTRUCTION DETAILS

- INSTALL 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PEDESTRIAN PUSHBUTTON AND PEDESTRIAN INSTRUCTIONAL SIGN. (NOTE: ONE 2 IN. PVC SCHEDULE 80 CONDUIT BEND).
- INSTALL PUSHBUTTON PEDESTRIAN POLE PER MD STANDARD NO. 801.01-01. INSTALL AUDIBLE PEDESTRIAN PUSHBUTTON AND PEDESTRIAN INSTRUCTIONAL SIGN. (SEE SHEET 2 OF 2 FOR DETAILS.)
- INSTALL 2 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - TRENCHED (DURING CONSTRUCTION).
- INSTALL 2 IN. POLYVINYL CHLORIDE [SCHEDULE 80] ELECTRICAL CONDUIT - PUSHED UNDER EXISTING RETAINING WALL.
- USE EXISTING CABINET/CONTROLLER. INSTALL APS CENTRAL CONTROL UNIT.
- USE EXISTING STEEL PEDESTAL POLE REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, PUSHBUTTON AND PUSHBUTTON SIGN. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD, AND AN ADDITIONAL 2 IN. PVC CONDUIT BEND IN EXISTING POLE BASE.
- USE EXISTING HANDHOLE.
- USE EXISTING CONDUIT.
- ADJUST EXISTING HANDHOLE TO PROPOSED GRADE.
- REMOVE EXISTING STEEL PEDESTAL POLE AND ALL ATTACHED EQUIPMENT.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEADS, PUSHBUTTONS AND PUSHBUTTON SIGNS.
- CAP AND ABANDON EXISTING CONDUIT.

GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
- PAVEMENT MARKINGS DETAILED ARE PROPOSED AND ARE TO BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH MD-SHA STANDARDS. ALL OTHER PAVEMENT MARKINGS ARE TO BE CONSIDERED AS EXISTING.
- GEOMETRICS SHALL BE CONFIRMED PRIOR TO THE INSTALLATION OF SIGNAL EQUIPMENT. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 IN. FROM A 60 IN. x 60 IN. LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10 FT. SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- THE LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 & FIG 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING APS EQUIPMENT FOR PROGRAMING TO MD-SHA SIGNAL SHOP. CONTACT MR. ED RODENHIZER 410-787-7650, 12 HOURS PRIOR TO CONSTRUCTION.
- ADA RAMP DETAILS, DIMENSIONS AND SPECS SHOWN ON ROADWAY PLANS.

PRELIMINARY/
FINAL REVIEW

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 146 (DULANEY VALLEY ROAD) @ DULANEY PLAZA
AND TOWSON TOWN CENTER SOUTH ENTRANCE

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE APRIL 9, 1996 CONTRACT NO. B-165-501-476

DESIGNED BY D. PETERS COUNTY BALTIMORE
DRAWN BY AP LOGMILE 03014600.19
CHECKED BY TIMS NO. I533
FAP NO. N/A TOD NO.

TS NO. 3570-D DRAWING - OF SHEET NO. 1 OF 2

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF
1 YEAR FROM THE DATE OF APPROVAL. SHOULD CONSTRUCTION NOT
BEGIN WITHIN THIS TIME FRAME THESE PLANS SHALL BE NULL AND VOID
WITHOUT A REVIEW FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600
1-800-583-8411
Fax 410-931-6601

GEOMETRIC LEGEND	
—	EXISTING
- - -	PROPOSED
UTILITY LEGEND	
—SD—	STORM DRAIN
—G—	GAS MAIN
—W—	WATER MAIN
—S—	SEWER MAIN
—E—	ELECTRIC CABLES
—A—	AERIAL CABLES
—T—	TELEPHONE CABLES
—F—	FIBER-OPTIC

BY: F. Brownley



PLOTTED: Monday, October 20, 2008 AT 10:11 AM
FILE: F:\2007\2007-0220\Des\Traffic Signal\833-003_MD146-Mall South Entr.dgn